



Integrated Flight Deck System



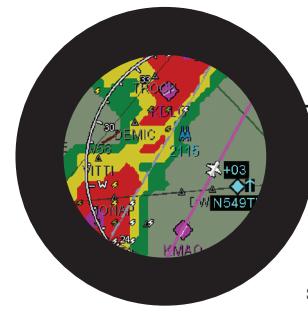
*Avidyne Entegra
brings affordable,
state-of-the-art
integrated display
capability to the
business and
general aviation
flight deck.*

Avidyne's *Entegra* Integrated Flight Deck system presents standard flight instrumentation including attitude direction indicator (EADI), horizontal situation indicator (EHSI), altitude, airspeed, vertical speed, moving map, weather, terrain, and traffic on large 10.4-inch diagonal, high-resolution, sunlight-readable full color displays, in easy-to-read formats.

The *Entegra* EXP5000 PFD conveys traditional primary flight instrumentation as well as a pilot-selectable moving map presentation of flight plan data and an RMI pointer, all within the primary field of view, reducing pilot workload. The versatile EX5000 MFD displays navigation data, MultiLink datalink weather, lightning, traffic, obstacles, and terrain with an intuitive user interface.

The fully-integrated design of *Entegra* makes it ideal for entry level through high-performance singles, piston twins, turboprops, and light jets. Many original equipment manufacturers (OEMs) have integrated *Entegra* into their new production aircraft, setting off a wave of integrated flight deck technology adoption not seen since the migration of EFIS from air transport to business jets.





Entegra

Integrated Flight Deck System

Integrated EHSI

The electronic horizontal situation indicator (EHSI) puts advanced navigation display capability in the primary field of view. Fully integrated with your VLOC/GPS, *Entegra* provides synchronized switching as you transition from the en route phase to the approach phase of your flight. When an instrument approach is selected, lateral and vertical guidance indications are presented on the attitude display for increased precision and reduced scanning. *Entegra*'s EHSI can be viewed in standard 360-degree compass rose, or in a 180-degree forward view, with selectable bearing pointer and flight-plan moving map display.



Easy-to-Fly Trend Indicators

The *Entegra* EXP5000 PFD provides 6-second trend indicators for airspeed, altitude and heading. Trend indicators, typically found on air transport and high-end corporate jets, allow you to fly with higher precision and reduced workload when changing or maintaining critical airspeeds or altitudes.

Integrated Autopilot Functions

The *Entegra* EXP5000 PFD may be coupled with the autopilot for altitude preselect, vertical speed select and heading select modes without the need for external controllers. Selection bugs and digital readouts for each of these parameters are provided for concise operation.

Primary Engine Instruments

Entegra displays critical engine data on the EXP5000 PFD during startup, and engine power data during all phases of flight enabling the pilot to quickly and efficiently manage engine settings during periods of high workload. Primary Engine data for piston aircraft includes manifold pressure, RPM, percent power, fuel flow and oil pressure, and turbine inlet temp, torque, Fuel flow, total fuel, oil pressure, Turbine RPM (Ng) and Prop RPM (Np) for turbine aircraft.

Simple Controls

The straight-forward user interface makes flying the *Entegra* a breeze. Human-factors studies and flight test experience suggest less is more in terms of PFD modes, and we've kept it simple, yet elegant. *Entegra* provides one-button access to frequent pilot settings such as BARO and altitude/ vertical speed/ heading bugs. Nav sources are push-button selectable for the EHSI needle, the bearing pointer, and the flight-plan moving map. The *Entegra* EXP5000 PFD was designed to have a learning curve of less than five minutes. It's simply that easy to use.

Full-time Wind Vector

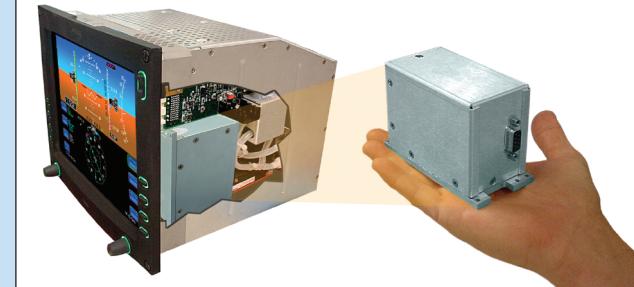
An integrated air data computer provides you with a full-time instantaneous wind vector, taking the guesswork out of finding the right altitude to optimize your flight time. It is equally valuable as you correct for wind while entering the pattern or flying an instrument approach.

Cross-Compare System™

In dual-PFD installations, Avidyne's unique Cross-Compare System™ constantly monitors both ADAHRS and provides visual alerts in the unlikely event of any discrepancy. The Cross-Compare System also monitors the aircraft navigation systems and provides alerts in the event of any inconsistency.



Solid-State ADAHRS
The Enabling Technology of FlightMax Entegra



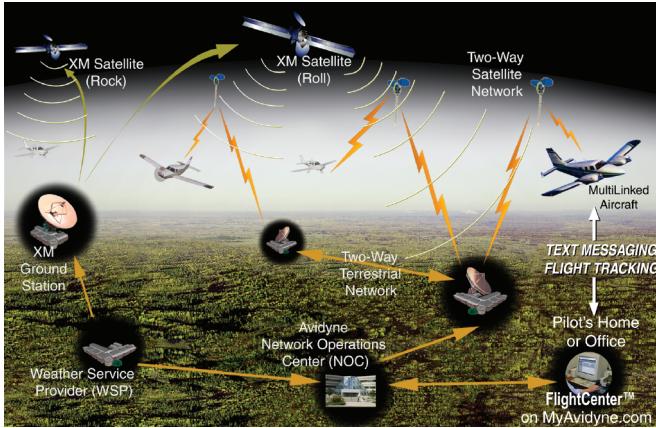
At the heart of the *Entegra* EXP5000 PFD is Avidyne's fully-integrated, solid-state Air Data/ Attitude and Heading Reference System (ADAHRS).

The compact, lightweight, ADAHRS system uses a 3-axis solid state gyro and accelerometer system combined with a magnetometer to replace vertical and directional gyros.

Avidyne's state-of-the-art ADAHRS provides Roll, Pitch, and Heading data with reliability far exceeding mechanical gyros, at a price point far below solid-state systems found in high-end corporate aircraft.

Connected to the pitot-static system, *Entegra*'s integrated air data computer provides airspeed, altitude, vertical speed, and outside air temperature (OAT), and continually updates the winds aloft and true airspeed (TAS) indications on the PFD.

MultiLink™ - XM Weather & FlightCenter™ Datalink Services



Avidyne's exclusive MultiLink™ technology seamlessly integrates broadcast and two-way datalink capability for the most advanced and easiest-to-use datalink system you can get.

With MultiLink, the *Entegra* system displays aviation weather at the high-speed update rates of the XM broadcast system, with the added enhancement of two-way datalink capability for aircraft-specific datalink communications.

The XM WX™ Satellite Weather service gives pilots comprehensive, graphical information about weather conditions all across the Continental United States (CONUS). XM WX delivers critical, real-time information for pilots including NEXRAD Radar in high resolution, full-color graphical format, overlayed on *Entegra*'s industry-leading moving map. XM also provides graphical and plain-English textual METARs, AIRMETs, SIGMETs, TFRs, winds aloft, freezing levels, TAFs, and cloud tops, as well as NEXRAD cell movement, hail warnings, and lightning strikes from the National Lightning Detection Network®.

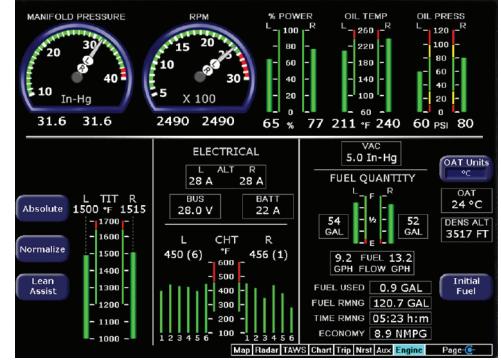
Using the two-way satellite network, *Entegra* connects the aircraft to FlightCenter™ and Avidyne's exclusive suite of datalink services including two-way text messaging and flight tracking. MultiLink also provides the added advantage of Canadian and Caribbean (Non-CONUS) coverage.

Whether you choose the high-speed XM WX solution for weather, or the advanced capability of MultiLink for XM WX and FlightCenter, *Entegra* delivers datalink benefits you simply can not get with any other system.

EMax™ Engine Indication System

Entegra's EMax™ Engine Indication System provides a handy graphical fuel totalizer, a lean assist mode, and a percent power display, which take the guess work out of fuel and power management. EMax monitors fuelflow and computes nautical miles per gallon, fuel remaining, fuel to way point, and fuel to destination. Temperatures, pressures, RPM, fuel flow, OAT, and electrical bus voltages are also monitored and displayed.

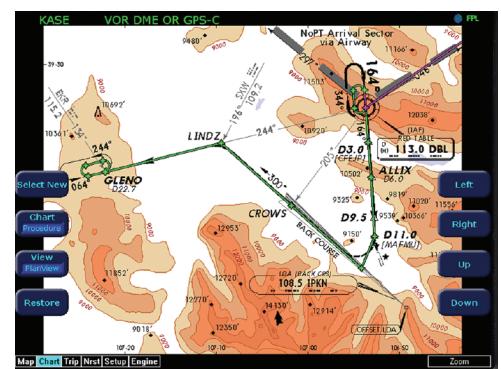
EMax provides the most intuitive engine performance monitoring and analysis capability available. EMax is also available for twin-engine and turbine aircraft.



CMax™ Maximizing Your Approach

Entegra's CMax™ Electronic Charts option offers a world-wide library of geo-referenced approach charts and airport diagrams, helping you manage and access critical flight information and reducing the amount of paper required on board your aircraft.

Utilizing Jeppesen's trusted JeppView™ Electronic Airway Manual, CMax makes accessing an approach or viewing an airport diagram a breeze. At startup, your departure airport chart is automatically loaded for ease of orientation, especially at unfamiliar fields. Your destination airport diagram and the list of



available approaches are automatically loaded at the time your flight plan is entered, and can be viewed easily using the *Auto-fill* capability, or you can easily select and view any approach at any airport in the database.

Entering the second century of aviation, integrated flight decks are the standard for new GA aircraft, and Avidyne's *Entegra* is leading the way.

Specifications

Size	Height	Width	Depth (Behind Panel)	Weight
EXP5000 PFD	8.5" 21.6cm	10.7" 27.2cm	9.4" 23.9cm	12.0 lbs. 5.45kgm
EX5000 MFD	8.5" 21.6cm	10.7" 27.2cm	4.62" 11.7cm	6.75 lbs. 3.07kgm

TSO Compliance

TSO-C2d	Airspeed Instruments
TSO-C3d	Turn & Slip Instruments
TSO-C4c	Bank & Pitch Instruments
TSO-C6d	Magnetic Direction Instruments
TSO-C8d	Vertical Velocity Instruments
TSO-C10b	Altimeter, Pressure Actuated
TSO-C37d	VHF Radio Communications Transmitting Equipment
TSO-C38d	VHF Radio Communications Receiving Equipment
TSO-C43c	Temperature Instruments
TSO-C44b	Fuel Flow Meters
TSO-C45a	Manifold Absolute Pressure Instruments
TSO-C47	Pressure Instruments-Fuel, Oil, Hydraulic
TSO-C49b	Electric Tachometer
TSO C106	Air Data Computer
TSO C110a	Airborne Passive Thunderstorm Detection
TSO C113	Airborne Multipurpose Electronic Display
TSO C147	Traffic Advisory System (TAS)

Displays

10.4" Diagonal, Color Active-Matrix LCD
Sunlight readable
800x600 pixels, 65,536 colors

System Power

6.0 A @ 28VDC

Operating Altitude

Up to 25,000 ft. (cabin pressure)

Operating Temperature

-20C to +55C
+70C Short term

Warranty

2 Years parts & labor included
Extended warranty service available

Functionality

Datalink

Heads Up Technologies XMD-076 using XM WX Satellite Weather Service including:

- NEXRAD
- NEXRAD cell movement,
- Graphical METARs
- Plain-English textual METARs
- AIRMETs
- SIGMETs
- TFRs
- Winds Aloft
- Freezing Levels
- TAFs
- Cloud Tops
- Hail Warnings
- Lightning Strikes (from National Lightning Detection Network*)

Internal two-way datalink transceiver for FlightCenter™ Services.

- Flight Tracking
- Two-Way Text Messaging

Vector-Graphic Moving Map

- Americas Jeppesen NavData
- International Jeppesen NavData (Optional)
- Portable Dataloader - Optional

GPS/FMS/LOC interface

- ARINC 429 GAMA Graphics

Approach Charts

- CMax™ - Jeppesen Electronic Airway Manual Charts (Optional)

Traffic Interfaces

- Avidyne TAS600 Series
- Ryan 9900B/9900BX TAS
- Honeywell KTA870 TAS
- Honeywell KMH880 IHAS
- L3 Skywatch/Skywatch HP TAS
- Garmin GTX 330 TIS Transponder

Autopilot Interface

- S-Tec 55X
- Bendix/King KAP 140

Terrain Awareness

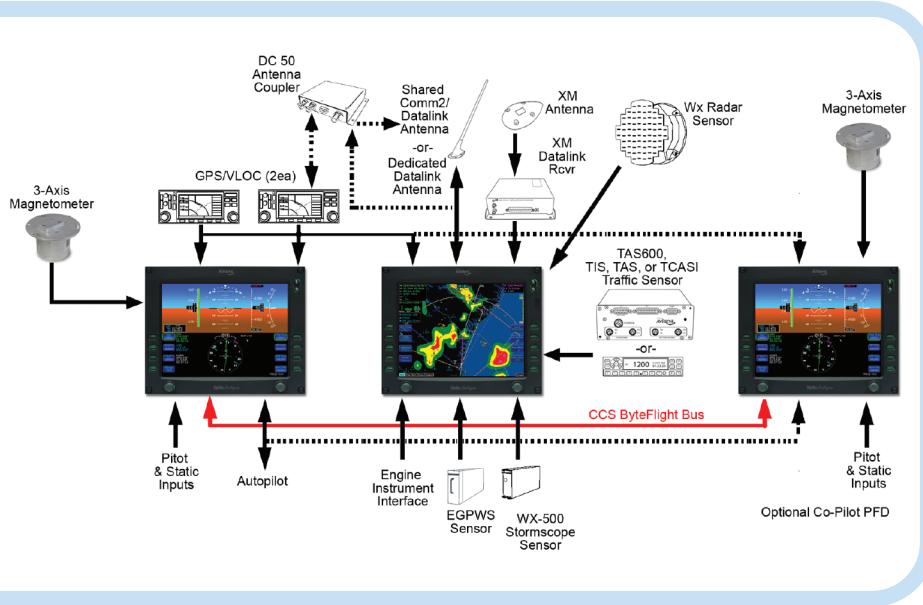
- Color-Contoured Terrain Base Map Built-In
 - Americas Terrain & US Obstacle Data
 - International Terrain Data (Optional)
- EGPWS/TAWS Interface (Optional)
 - Honeywell MK V, VI, VII, VIII, XXI, XXII
 - Honeywell KMH880 IHAS
 - Honeywell KGP 560 G.A.

Lightning Sensor Interface

- L3 WX 500 Stormscope

Radar Interface

- Bendix/King RDR 2000



Avionics installations require special skills and test equipment. Avidyne's limited warranty is valid only for equipment installed by an authorized Avidyne Service Center. Avidyne reserves the right to make changes to product specifications and design features without notice.

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